San Francisco Bay Conservation and Development Commission
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May 17, 2016

TO: Bay Fill Policies Working Group Members

FROM: Lawrence J. Goldzband, Executive Director (415/352-3653; larry.goldzband@bcdc.ca.gov)
Steve Goldbeck, Deputy Director (415/352-3611; steve.goldbeck@bcdc.ca.gov)
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SUBJECT: Draft Minutes of March 17, 2016, Commission Bay Fill Policies Working Group Meeting

1. **Roll Call, Introductions, and Approval of Agenda.** Bay Fill Policies Working Group (BFPWG or Working Group) Chair, Barry Nelson, called the meeting to order at the Port of San Francisco Board Room, Second Floor, Ferry Building, San Francisco, California, at 11:08 a.m. and asked everyone to introduce themselves.

Working Group members in attendance included Commissioners Barry Nelson, Jason Brush, Katerina Galacatos, Jim McGrath, and Sean Randolph. The presenter was Brian Ross, a member of the Dredging and Sediment Management Team of the U.S. Environmental Protection Agency. Also in attendance were Brenda Goeden, Steve Goldbeck, and Brianne Riley.

Ms. Goeden stated a court reporter was in attendance to provide draft minutes of the meeting to better capture the discussion points.

2. **Approval of February 18, 2016, Meeting Summary.** The summary was approved with no changes.

3. **San Francisco Bay Plan Policies Regarding Beneficial Reuse of Sediment.** Ms. Goeden referenced a document included in the meeting packet, titled "Policy Background Regarding Beneficial Reuse of Sediment." She noted the highlighted portions of the Applicable Bay Plan Policies section that were key to the discussion, particularly Policy 11.

Chair Nelson agreed on the importance of Policy 11 and emphasized subsection (j).

Commissioner McGrath stated the importance of recognizing the underlying legislative authority and direction to better understand the standard that policies must meet. He read Government Code Section 66605(a) for Working Group members.

Ms. Goeden introduced Brian Ross, a member of the Dredging and Sediment Management Team of the U.S. Environmental Protection Agency (EPA).

Mr. Ross provided an overview, by way of a PowerPoint presentation, of the background, challenges, and opportunities in dealing with dredged material around the San Francisco Bay, key federal policies and roles, the San Francisco Long Term Strategy for the Placement of Dredged Sediment in the Bay Region (LTMS) Program goals and successes, ocean disposal, in-Bay placement, and managing sediment as a resource.

Mr. Ross stated the logistics of the equipment used makes a difference. The dredging equipment must be matched to not only the type of channel dredged, but also where the dredged material will be deposited. Along with logistic considerations, there are budget considerations – dredging equipment is expensive to run.

Mr. Ross stated there are other considerations that make environmental impacts difficult to address, such as dredging turbidity, disposal turbidity, and entrainment.

Mr. Ross stated the distinction between the Clean Water Act (CWA) of 1977 and the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA), also known as the Ocean Dumping Act, is the purpose of what is being done. There is an overlap of the CWA and MPRSA within the first three miles offshore where it is imperative to distinguish the point of the disposal.

If the purpose is for fill or some use other than waste disposal, the CWA covers it. The issue with most dredgers, including the U.S. Army Corps of Engineers (Corps), is cost-effective waste disposal. The EPA's goal is for beneficial reuse of dredged materials. The purpose for dredging should play a role in policy making.

Mr. Ross stated the definition of the term "fill" in the CWA diverges from the way the term is used in the San Francisco Bay Conservation and Development Commission (BCDC) policies. In general, the BCDC policies are against Bay fill as a waste discharge as opposed to regulating it for a beneficial purpose. According to section 404(b) Guidelines of the Code of Federal Regulations (CFR), the discharge of dredge material is mandated to be the minimum necessary – the least damaging alternative to the water environment.

a. **BFPWG Member Questions and Discussion.** Commissioner Brush emphasized that it is the least damaging alternative that meets the project purpose. If the project purpose is to restore or to have an environment benefit, such as beach nourishment or wetlands restoration, the baseline presumption that less fill equals less impact is not valid.

Commissioner McGrath stated the need to clarify the differences between the terms "practicability" and "feasibility."

Chair Nelson agreed and stated the way the terms are approached is different – for example, whether it is for beach nourishment or habitat enhancement as opposed to disposal.

Mr. Ross agreed that the approach can be different, but stated the need to determine if the purpose the discharge is used for does not have adverse impacts on its own. The disposal must benefit the Bay, not just be an inexpensive way of reusing the material.

Presentation, continued: Mr. Ross continued with his presentation slide on the MPRSA and CWA 3-mile overlap limit. He stated the MPRSA has a similar concept to the alternative analysis concept except it lacks the specificity of the 404(b) Guidelines about how the least damaging alternative is determined. The MPRSA regulation language is about the EPA-approved, independently-established need for ocean disposal.

Chair Nelson summarized that in both cases there is a general presumption against ocean disposal, which can be overcome by either need or project purpose.

Mr. Ross agreed. He stated the first seven slides of his presentation were to provide a background for his discussion. He continued his PowerPoint presentation by providing an overview of the origin of the LTMS, the time before the LTMS, LTMS goals and plan and how to get there, meeting the LTMS targets, current status, successes, operating in the new world, the 12-year review conclusions, and next steps of the LTMS Program.

b. **BFPWG Member Questions and Discussion:** Commissioner Randolph asked the location of the ocean disposal site and how far it is from the mouth of the Bay.

Mr. Ross stated the ocean disposal site is the farthest offshore and the deepest in the country. It is approximately 55 miles offshore of the Golden Gate and is in almost 10,000 feet of water. It is an 18- to 20-hour round trip from the Oakland Channel.

The dredgers are not allowed to dump at the ocean site if their equipment is over 80 percent full to prevent sloshing over into the sanctuary and to adhere to the open ocean weight/height limit.

Commissioner McGrath asked about costs of the disposal sites.

Mr. Ross stated the cost is approximately $15 per cubic yard for the Bay, $23 to $25 per cubic yard for the ocean, and $30 per cubic yard for reuse of clean material. Disposal cost for contaminated material can be upwards of $100 per yard.

Commissioner Randolph asked how the disposal of material far offshore relates to the reuse for recharging beaches.

Mr. Ross stated most maintenance dredging in the Bay is not sand so is not used for recharging.

Ms. Goeden stated the Corps dredges the main ship channel, which is approximately three to five miles offshore. They use the sand-only San Francisco Channel Bar Disposal Site to dispose of their dredged material for beach nourishment in the channel.

Mr. Ross stated it is a great illustration of a practicable solution.

Presentation, continued: Mr. Ross continued his discussion with the slide titled "How to Get There." He summarized the 12-year transition period beginning in 2000 to systematically reduce in-Bay disposal. He stated the 12-year goal was met, but efforts continue for further reductions.

LTMS was set up to ensure a variety of disposal options and the ocean has been an important component of that. It is what helped meet the 12-year LTMS in-Bay goals over the transition period. However, the majority of the reuse material, except for maintenance dredging, has come from Corps maintenance projects: Oakland and Richmond Channel dredging. Those two projects use the ocean disposal site as their basic plan.

Mr. Ross stated this is important to understand. The Corps is under the federal standard and can only pay the lowest amount to dispose of dredged material. Since the Corps cannot pay a penny more for maintenance dredging on their own, then the least-cost disposal options that those projects are designated for are tied to ocean disposal already in the budgeting, which may be $20 to $25 per cubic yard.

Reuse of those materials is not much more than that and at times is equal to it. Even if it is a great investment for society to pay one dollar more per cubic yard, the Corps could not do it. Someone else would have to pay the difference. That option is always there.

Mr. Ross stated, without the ocean disposal site, the standard site for the Corps projects would be in the Bay. He compared the cost of dumping in the Bay at approximately $10 per cubic yard versus $25 to $30 to do beneficial reuse. The Corps would not ask for bids and no one would pay the large difference per cubic yard for one million cubic yards of material.

Mr. Ross discussed unconfined in-Bay placement of dredged material. He stated placing material unconfined in the Bay to let it erode to where it should do some good can make a difference in beneficial impacts. The question is whether there are enough locations to manage much capacity annually to erode into the target locations.

He stated there has been some modeling through LTMS funding in the South Bay, looking at placing bottom dumping in the South Bay Channel. The problem is the area will only accept as much material as is eroded and spread per year. The Bay alone does not have the capacity to allow the dumping of the three million yards of dredged material per year that is required, but the EPA is actively looking for solutions.

Mr. Ross stated that is why he began his presentation with the fact that dredging is all about logistics and budgets.

c. **BFPWG Member Questions and Discussion:** Commissioner McGrath stated science can predict in some areas with great confidence how sediment will move after disposal, but it does not mimic the natural process.

Chair Nelson asked how much redeposition is beneficial and, as the sites are studied, whether there will be break points for the amounts placed per year in some sites where there will not be much more erosion.

Mr. Ross stated there are break points. There have been monitoring studies done under LTMS in the North and South Bays. There was a small delta percent that remained over a short period of time in the North Bay. In the South Bay, a larger volume of material was modeled in a location that was expected to retain more of the material. Both locations benefited and retained material.

The models studied the physical nature of the rate of input necessary to keep up with erosion and, when it erodes, even if that rate is met, if the material is going where required enough to outweigh the impacts of dredging disturbance to be beneficial. There are several science questions yet to be answered that will require a several-step process.

Chair Nelson asked about the timing to see more results from the trial areas.

Ms. Goeden stated the Corps will create some conceptual models of the physics and biology of the area, look at the impacts of the dredging community, and consider how dredged material can be transported to a wetland habitat. The Corps had hoped to complete this plan within the first year.

Ms. Goeden stated impact studies are required for the benthic environment.

Mr. Ross stated it will be three to five years before a pilot program can be put into place. The work the BCDC is currently doing is timely.

Mr. McGrath emphasized that this is not a panacea. There are now 1,800 dams on the streams that feed the wetlands. He agreed that dredged material alone cannot be used keep up with sea level rise.

Deputy Director Goldbeck stated finding the mix between the Corps and its need to maintain the channels quickly and efficiently and smaller beneficial reuse projects will be a challenge. Many of the smaller dredging projects will be ideal for some of these kinds of ideas such as rainbowing or feeding channels.

4. **Future BFPWG Meeting Topic Discussion.** Chair Nelson asked who will be invited to present at the next BFPWG meeting.

Ms. Goeden stated the Working Group has walked through the habitat-based policies. She suggested, as a next step, summarizing the summaries. She also suggested, for the next two to three meetings, checking in with policies for Horizon Bay and doing a recap meeting before moving to policies related to development.

Chair Nelson suggested making it three meetings to more fully discuss these issues and include the integration memo.

Ms. Goeden stated she hoped to have the integration memo ready by the next meeting. She suggested including an introduction on integration and the policies for Horizon Bay at the next meeting, and devoting the following meeting solely to the integration discussion.

5. **Adjournment.** There being no further business, Chair Nelson adjourned the meeting at 12:36 p.m.